



Nutritional and neuroendocrinological involvement in the control of luteinizing hormone secretion of Mediterranean goat females during the onset of the breeding season



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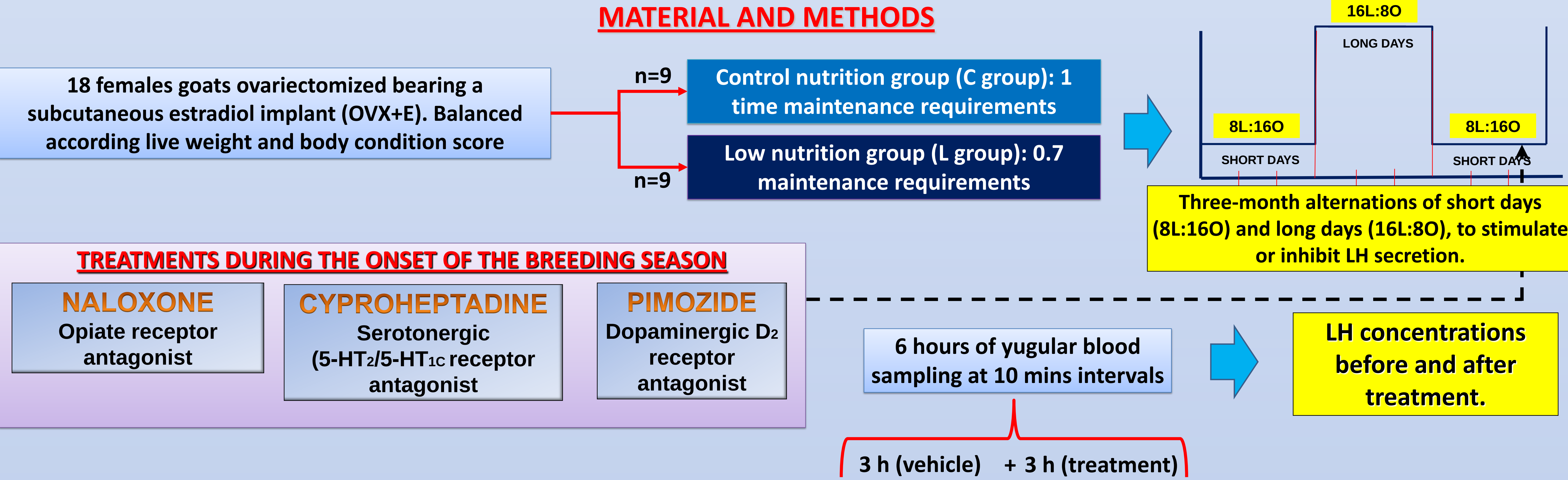
INTRODUCTION

- Mediterranean female goats shows a clear seasonality of their reproductive activity. This seasonality is controlled by photoperiod but it is strongly influenced by different factors, like level of nutrition and neuroendocrinological systems.
- There are very few studies on goats about the role of the different neuroendocrinological mechanisms on the seasonal variations of the reproductive activity of female goats.

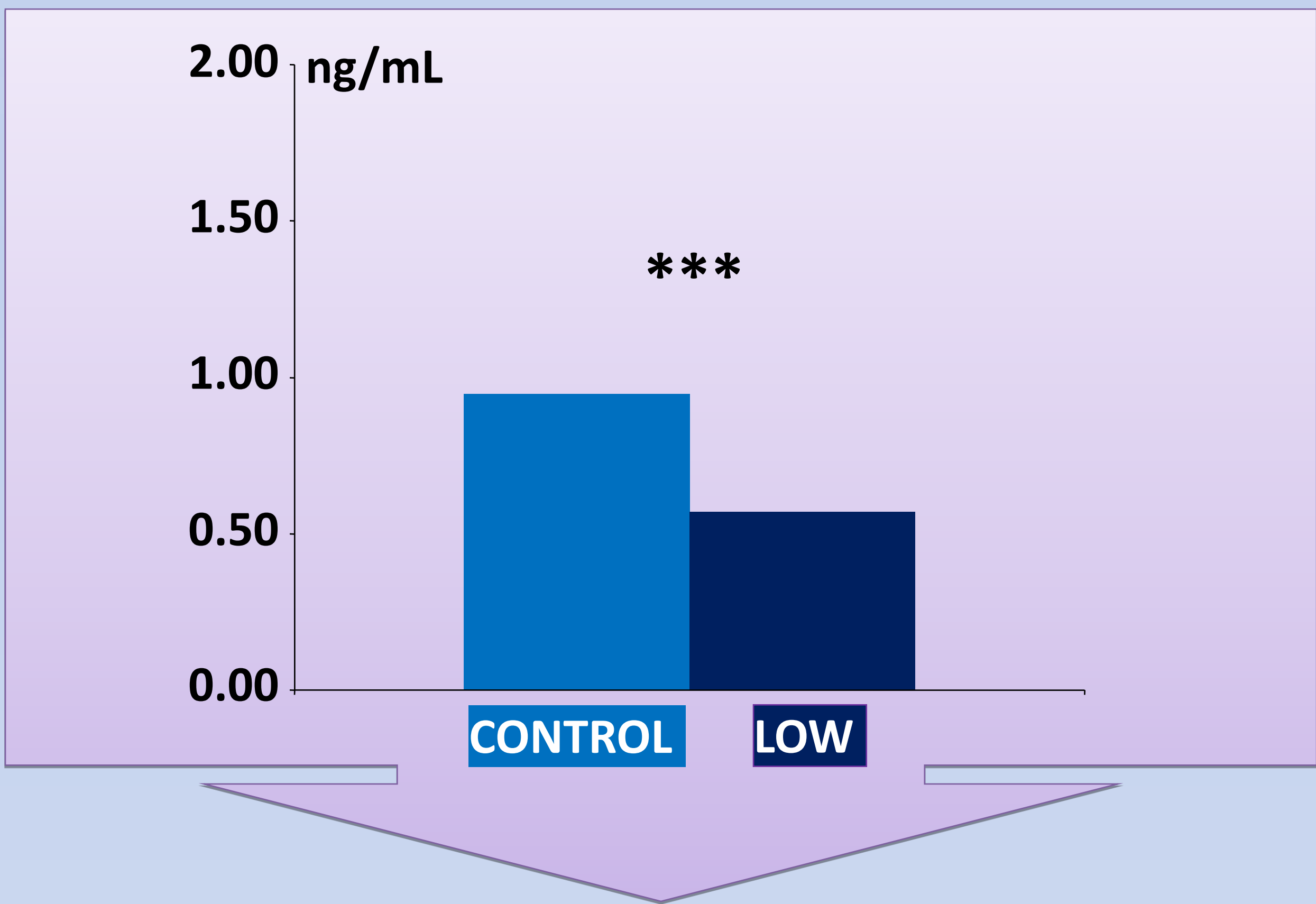
AIMS

- Determine the role of different neuroendocrinological systems (opioidergic, dopaminergic, and serotonergic systems) in the control of LH secretion in Mediterranean goat females and whether such role could be modified by nutrition during the onset of the breeding season.

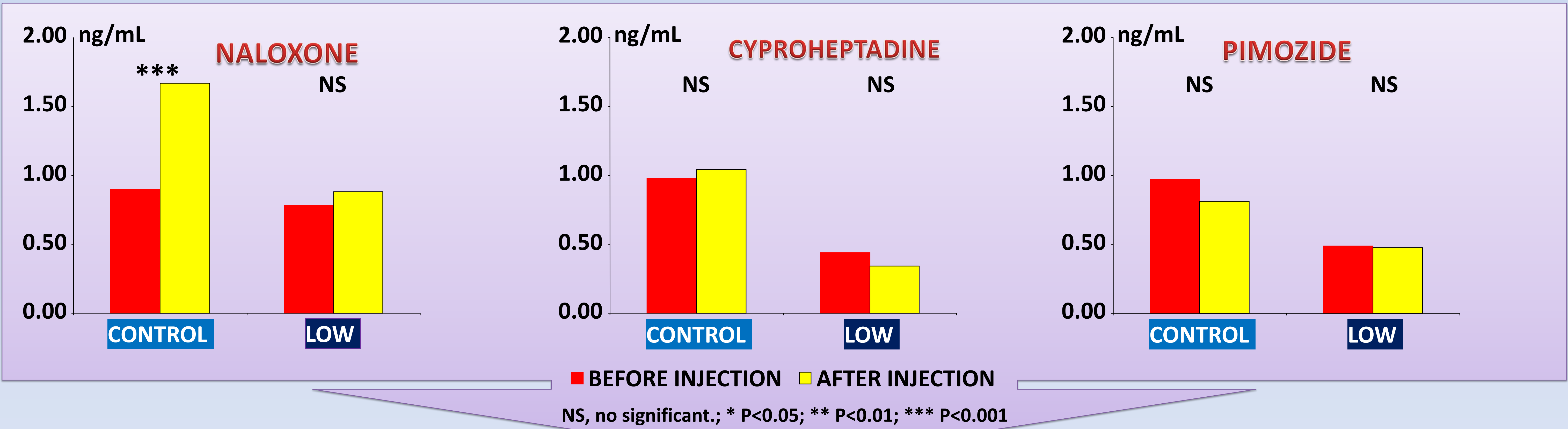
MATERIAL AND METHODS



RESULTS



A clear effect of level of nutrition was observed on mean LH concentrations before injection of the different antagonist (0.95 ng/mL vs 0.57 ng/mL, respectively, P<0.001).



In comparison with the pre-injection period, **naloxone** significantly increased the mean LH concentrations in the C group.

CONCLUSIONS

Results provide evidence that dopaminergic or serotonergic systems seems to be not involved in the inhibition of LH secretion at the onset of the breeding season, however the ability of naloxone to increase LH concentrations at this period could be enhanced by a higher plane of nutrition in Mediterranean goat females.

ACKNOWLEDGEMENTS

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